

UNIVERSITY ADMIT ELIGIBILITY PREDICTOR

TEAM ID: PNT2022TMID09307

1. INTRODUCTION

1.1 Project Overview

Students are often worried about their chances of admission to university. The aim of this project is to help students in shortlisting universities with their profiles. The predicted output gives them a fair idea about their admission chances in a particular university. This analysis will benefit the students who are currently preparing or will be preparing to get a better idea.

1.2 Purpose

A person's education plays a vital role in their life. While planning for education students often have several questions regarding the courses, universities, job opportunities, expenses involved, etc. Securing admission in their dream university is one of their main concerns. It is seen that often students prefer to pursue their education from universities which have global recognition.

2. LITERATURE SURVEY

When it comes to international students the first choice of the majority of them is the United States of America. With the majority of worlds highly reputed universities, wide range of courses offered in every sector, highly accredited education system and teaching, scholarships provided to students, best job market and many more advantages make it the dream destination for the international 1 student. According to research, there are above 8 million international students studying in more than 1700 public and 2500 private universities and colleges across the USA. (MasterPortal (2017))

2.1 Existing problem

Universities take into consideration different factors like score on aptitude based examination like the General Record Examination (GRE), command over the English language is judged based on their score in English competency test like Test Of English as a Foreign Language (TOEFL) OR International English Language Testing System (IELTS), their work experience in same or other fields, the quality of the Letters Of Recommendation (LOR) and the Statement Of Purpose documents provided by the student etc. Based on the overall profile of the student decision is taken by the universities admission team to admit or reject a particular candidate.

2.2 References

1. Geiser, Saul, and with Roger Studley. "UC and the SAT: Predictive validity and differential impact of the SAT I and SAT II at the University of California." *Educational Assessment* 8.1 (2002): 1-26.
2. Rothstein, Jesse M. "College performance predictions and the SAT." *Journal of Econometrics* 121.1-2 (2004): 297-317.
3. Leonard, David K., and Jiming Jiang. "Gender bias and the college predictions of the SATs: A cry of despair." *Research in Higher education* 40.4 (1999): 375-407.

2.3 Problem Statement Definition

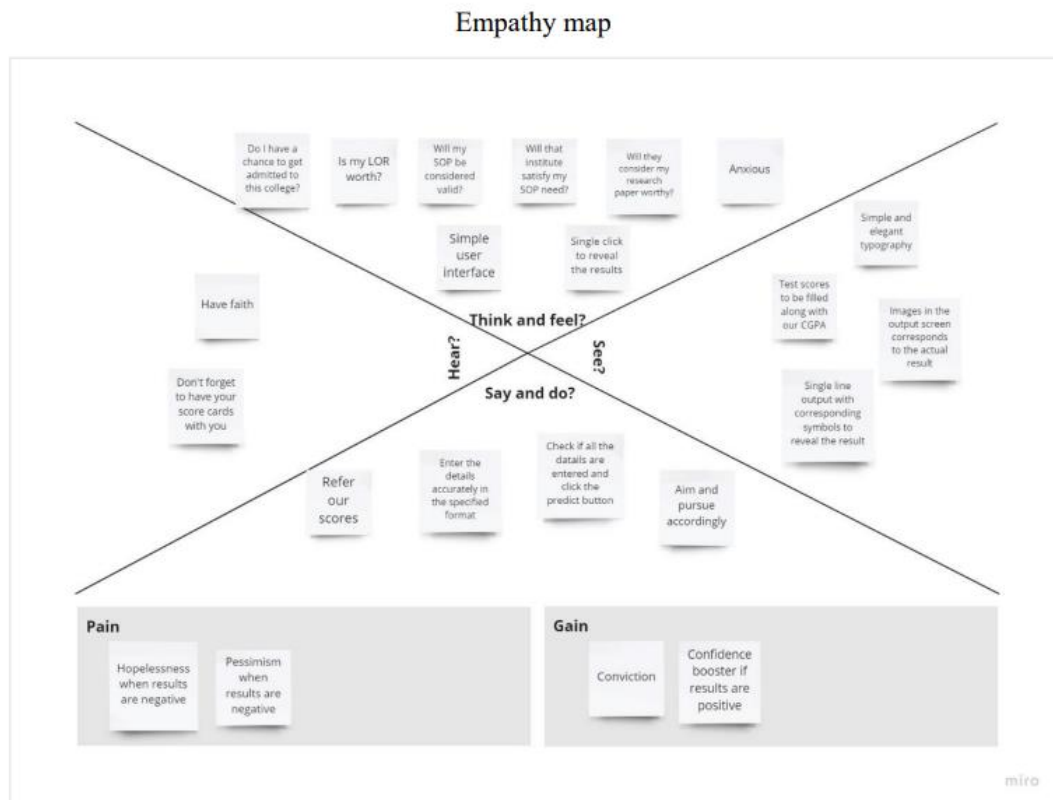
Build an application that predicts the university admission chances of a student powered by machine learning models. Train the model and host it on IBM cloud. The majority of international students studying in the USA are from India and China. In the past decade, India has seen a huge increase in the number of students opting to pursue their education from foreign universities in countries like The USA, Ireland, Australia, Germany, etc. Although there are significant universities and colleges in India, students are finding it difficult to get admission in the highly ranked colleges and also getting a job is a challenge as the ratio of number students to the number work opportunities available is quite high. India is one of the leading counties in the number of software engineers produced each year; it becomes tough for the students to find jobs in elite companies due to high competition. This motivates a good number of students to pursue post-graduation in their field. It is seen that the number of students pursuing Masters in Computer Science field from universities in the USA is quite high; the focus of this research will be on these students.

3. IDEATION & PROPOSED SOLUTION

The project aims to develop an application that uses artificial intelligence with the help of chat bot to customize products for the customers which enhances the fame of ecommerce store and reduce the time which customers spends on choosing products. The application also uses IBM cloud storage for storing objects.

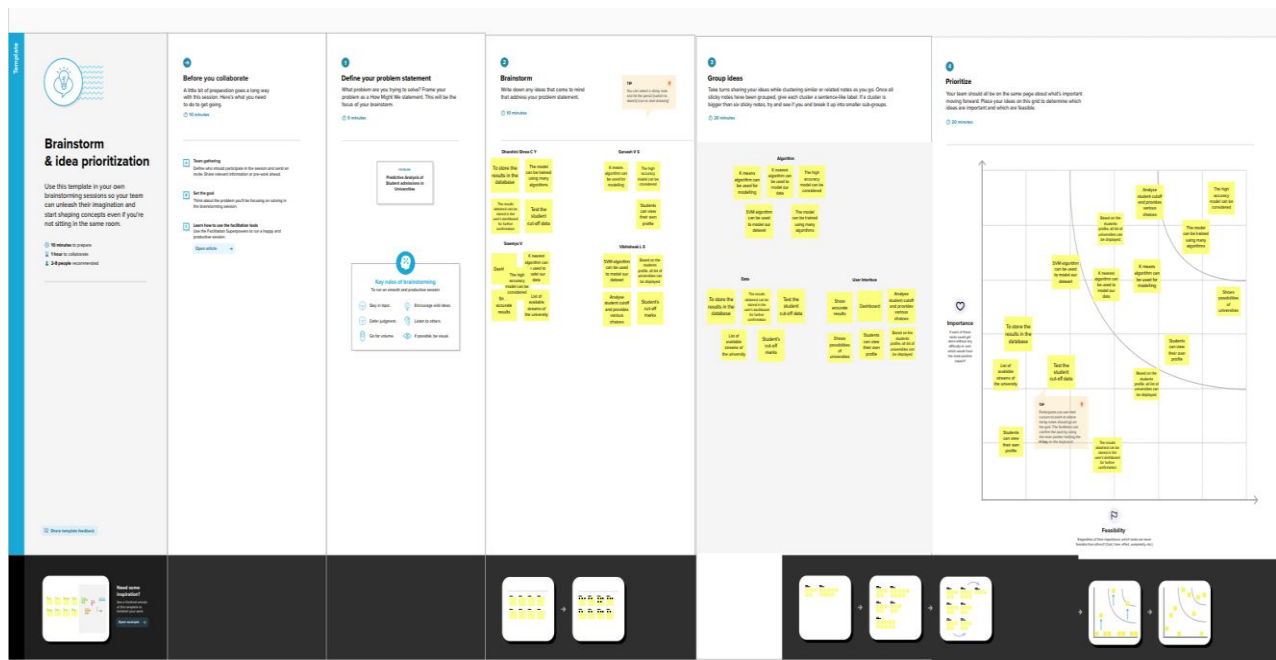
An application that predicts the university admission chances of a student powered by machine learning models. Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. The primary objective of this research is to develop a system to solve the problems the international students are facing while applying for universities in the USA.

3.1 Empathy Map Canvas



3.2 Ideation & Brainstorming

This task of shortlisting the universities where the student has high chances of admission is difficult for mainly for the international students, so they end up with applying to many universities in hopes of getting admission in few of them thus investing an extra amount of money in the applications. There are several portals and websites which provide information and help to students in shortlisting the universities, but they are not reliable. Most of the students don't take the risk of evaluating the colleges by themselves, and they seek the help of the education consultancy firms to do it for them. Again, for these students have to pay a huge amount of fee to the education consultant.



3.3 Proposed Solution

Finally, K Nearest Neighbours and Decision Tree algorithms were used as they were found to be the best fit for the system developed. Also, we will be creating a simple user interface which will help the users to input the data related to student profile and get the predicted result for the application based on the profile as output. This research will thus eventually help students saving the extra amount of time and money they have to spend at the education consultancy firms. And also it will help them to limit their number of application to a small number by proving them the suggestion of the universities where they have the best chance of securing admission thus saving more money on the application fees.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Most of the people especially from the rural area are not that much aware of the standards which has been followed in various universities. At the time of completion of their higher secondary, they are having various stream willingness but not everybody is getting into the actual stream they have been wished. Same in the case of college too.
2.	Idea / Solution description	The aim of our project is to bring a new platform for the students who are in the phase of university admission, to predict the college in which they can get in to the stream they have been decided and wished already based on their performances in their academics includes cut-offs and quota. Here we are bringing the output which has good percentage of accuracy.
3.	Novelty / Uniqueness	In our University Admit Eligibility Predictor, student can able to get the complete insights about all the possible colleges and branches based on their cut-offs and quota. It will be like the practise session for them before attending the counselling conducted by various universities.
4.	Social Impact / Customer Satisfaction	Our project let the students to know about the possible colleges and streams based on their cut-offs and quota. So, it will be very helpful for them in their counselling processes.
5.	Business Model (Revenue Model)	We can have two models for revenue, one is the subscription model. In here user will be asked to get the subscription in order to get output from our prediction. Subscription may be monthly or weekly. Actually, this model is for admission centres. The next revenue model is pay per each prediction model, here the individual has to pay for each prediction. This model has been designed for the individual
		who want to get the possible colleges and streams based on their cut-offs and quota.

6.	Scalability of the Solution	We can build this prediction model with higher percentage of accuracy by considering the historical data and by having various algorithms. The algorithms include K nearest neighbour, K means, SVM (Support Vector Machine) to predict best thing among all and to predict the similarity among themselves and at last to predict the possibilities respectively.
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3.4 Problem Solution fit

We will be developing a University Admit Eligibility Predictor system which will help the students to predict the chances of their application being selected for a particular university for which they wish to apply based on their profile. Also, the system will provide a recommendation of universities to the student to which the student has a high possibility of getting admission. Multiple machine learning classification algorithms were evaluated to develop the system.

Project Title : University Admit Eligibility Predictor		Project Design Phase-I - Solution Fit		Team ID: PNT2022TMD09307	
Define CS, fit into	1. CUSTOMER SEGMENT(S) <small>Who is your customer? I.e. working parents of 0-5 y.o. kids</small> Students are our primary users other than students the persons or the organizations who is giving career guidance also using our predictor.	6. CUSTOMER CONSTRAINTS <small>What constraints prevent your customers from taking action or limit their choices of solutions? I.e. spending power, budget, no cash, network connection, available devices.</small> Customer constraints includes <ol style="list-style-type: none"> Poor network connectivity. System with very low processing speed. Improper data feeding. 	5. AVAILABLE SOLUTIONS <small>Which solutions are available to the customers when they face the problem or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? I.e. pen and paper is an alternative to digital notetaking</small> <ol style="list-style-type: none"> Some websites are available in the internet in order to predict the universities but they are not even 50 percent accurate. Can able to predict the college and the stream by the own manual calculation. 	Explore AS.	
	2. JOBS-TO-BE-DONE / PROBLEMS <small>Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.</small> Predicting the possible colleges and streams for the students who have been completed their higher secondary with higher percent of accuracy.	9. PROBLEM ROOT CAUSE <small>What is the real reason that this problem exists? What is the back story behind the need to do this job? I.e. customers have to do it because of the change in regulations.</small> <ol style="list-style-type: none"> Unawareness about the possible colleges and streams based on the cut-offs. Unavailability of high accurate university prediction model 	7. BEHAVIOUR <small>What does your customer do to address the problem and get the job done? I.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (I.e. Greenpeace)</small> Students who have been completed their higher secondary has to feed their academic data into our university predictor, then only they will come to know about the possible colleges and streams based on the fed data.		
Focus on J&P, tap into BE, understand	3. TRIGGERS <small>What triggers customers to act? I.e. seeing their neighbor installing solar panels, reading about a more efficient solution in the news.</small> <ol style="list-style-type: none"> Plans about their graduation and degree. Confusions in college and stream selection Low seats availability 	10. YOUR SOLUTION <small>If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality. If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.</small> Developing the user-friendly prediction model with higher percentage of accuracy by considering the historical data and by having various algorithms.	8. CHANNELS of BEHAVIOUR 8.1 ONLINE <small>What kind of actions do customers take online? Extract online channels from #7</small> Need to feed the data about their academic performance includes cut-offs and quota	Identify strong TR &	
	3. EMOTIONS: BEFORE / AFTER <small>How do customers feel when they face a problem or a job and afterwards? I.e. lost, insecure - confident, in control - use it in your communication strategy & design</small> Before: Students are totally confused with their selection and they are so stresses too. After: Students can able to select their willing one confidently by seeing all other possibilities with full satisfaction.		8.2 OFFLINE <small>What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.</small> Do calculate manually by having all the required academic details by comparing it with the historical data.		

4. REQUIREMENT ANALYSIS

Requirements analysis, also called requirements engineering, is the process of determining user expectations for a new or modified product. These features, called requirements, must be quantifiable, relevant and detailed. In software engineering, such requirements are often called functional specifications. Requirements analysis is critical to the success or failure of a systems or software project. The requirements should be documented, actionable, measurable, testable, traceable, related to identified business needs or opportunities, and defined to a level of detail sufficient for system design.

4.1 Functional requirement:

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Requirements	All the needed files are been asked to feed in the website. By having the file, it will do all the preprocessing and shows all the required information to the student(user). The information includes the list of all the possible universities and streams.
FR-4	User Details	Has to feed some documents <ol style="list-style-type: none"> 1. Score Sheets 2. Letter of Recommendation (LOR) 3. Statement of Purpose (SOP) 4. Curriculum Vitae (CV)

4.2 Non-Functional requirements

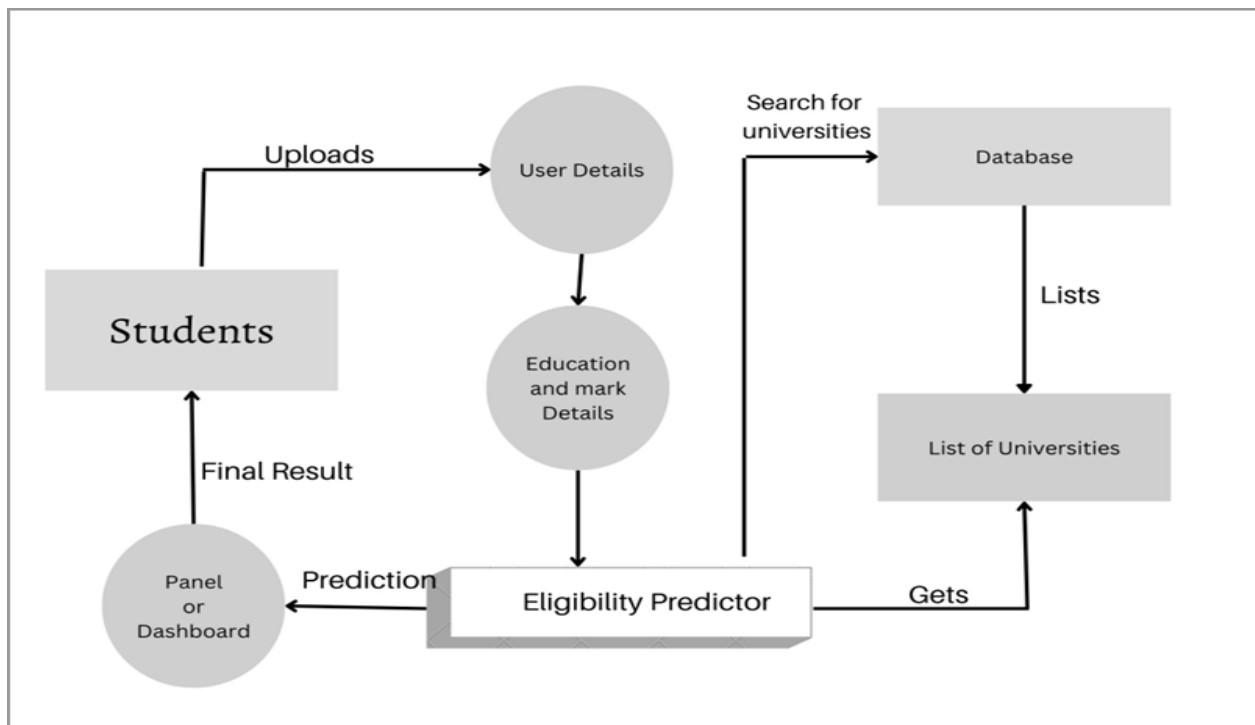
FR No.	Non-Functional Requirement	Description
NFR-1	Usability	<ul style="list-style-type: none"> • Our website is very user friendly so even the layman can able to access our website. • There is no need for any pre requisite technical skill in order to access our website. • Each and every content of the page will be in synchronous way. Thus, it will not take much time to refresh or reload.
NFR-2	Security	<ul style="list-style-type: none"> • The user who is having the valid credentials can able to access our site. • Data they are feeding into our website will not be accessed by any one of them.
NFR-3	Reliability	<ul style="list-style-type: none"> • Our website is more reliable. Since nobody can able to see the data fed by the user. • The user can get the result with higher percent of accuracy.

NFR-4	Performance	<ul style="list-style-type: none"> User can able to handle the process in our website even by having internet connection with normal speed. There is no need of high-speed internet connection. Traffics can be handled effectively.
NFR-5	Availability	<ul style="list-style-type: none"> Students can avail our website from any of the browser in faster and efficient way.
NFR-6	Scalability	<ul style="list-style-type: none"> Our website will be easily scalable in the case of getting increasing number of users data from our website. If needed we do scale up the CPU or Processer in order to speed up the processing capability of our website. There by it reduces the downtime of our website.

5. PROJECT DESIGN

5.1 Data Flow Diagrams

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.



5.2 Solution & Technical Architecture

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.

Provide specifications according to which the solution is defined, managed, and delivered.

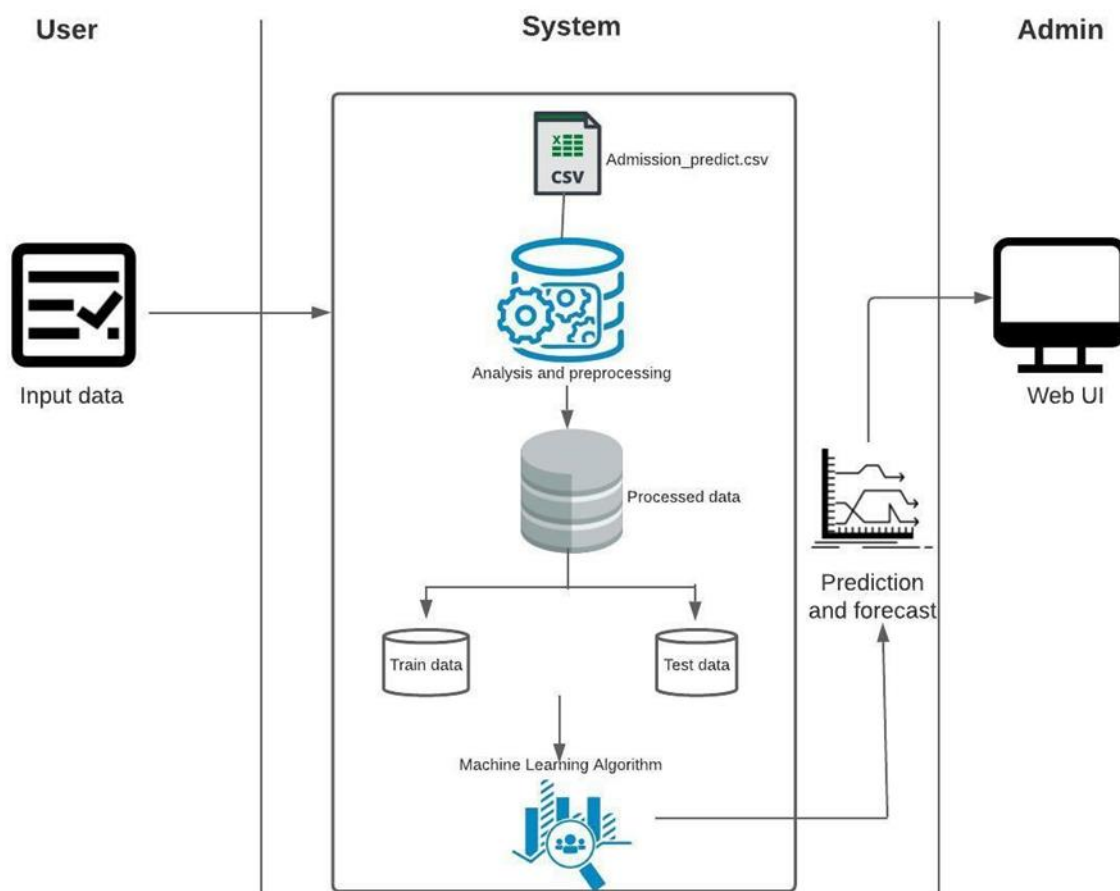


Table-1: Components and Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interacts with the application through a Web UI	HTML, CSS, Python, Flask
2.	Application Logic-1	Logic for collecting the input from the user	Python
3.	Application Logic-2	Integrating Machine Learning model with our application	Python
4.	Database	Numeric data	MySQL
5.	File Storage	To store files such as prediction report	Local Filesystem
10.	Machine Learning Model	Predictive modelling is a mathematical process used to predict future events or outcomes by analysing patterns in a given set of input data.	Predictive Modelling
11.	Infrastructure (Server)	Application Deployment on Local System Local Server Configuration: Built-in Flask web server	Flask, Web server

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask	Micro web framework with python
2.	Security Implementations	Http authentication, Session based authentication	Flask security
3.	Scalable Architecture	Size is everything, and Flask's status as a microframework means that you can use it to grow a tech project such as a web app incredibly quickly. Its simplicity of use and few dependencies enable it to run smoothly even as it scales up and up.	Flask
4.	Availability	Higher compatibility with latest technologies and allows customization	Flask

5.	Performance	Integrated support for unit testing. <ul style="list-style-type: none"> • RESTful request dispatching. • Uses Jinja templating. • Support for secure cookies 	Flask
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5.3 User Stories

A user story is an informal, natural language description of features of a software system. They are written from the perspective of an end user or user of a system, and may be recorded on index cards, Post-it notes, or digitally in project management software.[1] Depending on the project, user stories may be written by different stakeholders like client, user, manager, or development team.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Student)	Dashboard	USN-1	As a user, I can view the cut off marks of previous years in my dashboard	I can access and download the files	High	Sprint-1
		USN-2	As a user, I can view university details and their rankings	I can only view(read-only)	Medium	Sprint-1
		USN-3	As a user, I can review the experience of the students in the university	I can access the review sections	Medium	Sprint-2
		USN-4	As a user, I can upload my documents	I have read and write access to upload files	High	Sprint-1
		USN-5	As a user,I can fill out the general and educational details in the form provided	I have read and write access to the forms filled	High	Sprint-2
	Predictor	USN-6	I can view the list of universities in which I am eligible to get an admission	I can receive the final result as whether eligible or not	High	Sprint-2
		USN-7	I can view the list of universities I am eligible with the same cut-off but in previous years	I can access the files with read-only permission	Medium	Sprint-2
Administrator	Dashboard	USN-8	As an administrator,I can have access to update the latest updates of the universities	I can have access to read and write the university information in the dashboard	High	Sprint-3
		USN-9	As an administrator,I can access any resources available in the page	I can access the resources that are available	Medium	Sprint-3
		USN-10	As an administrator,I can have a track on the universities the student is eligible to get admission at	I can access the list of the universities obtained as final result	High	Sprint-3

6. PROJECT PLANNING & SCHEDULING

6.1 Product Backlog, Sprint Schedule, and Estimation

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Dataset Analysis	USN-1	Download the admission_predict dataset and analyze it.	2	High	Narmatha S,Paarkavi A, Hemalatha R, Jameslurtin V
	Dataset preprocessing	USN-2	Examine the dataset and perform preprocessing steps	1	Medium	Narmatha S,Paarkavi A, Hemalatha R, Jameslurtin V
Sprint-2	Model Creation and Training	USN-3	Create a model from the training data	2	High	Narmatha S,Paarkavi A, Hemalatha R, Jameslurtin V
	Testing the model	USN-4	Choosing the best model from the obtained accuracy	2	Medium	Narmatha S,Paarkavi A, Hemalatha R, Jameslurtin V
	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	Narmatha S,Paarkavi A, Hemalatha R, Jameslurtin V
Sprint-3	Dashboard	USN-6	As a user, once I log in, I can view the Admission Prediction page	1	High	Narmatha S,Paarkavi A, Hemalatha R, Jameslurtin V
	Predictor	USN-7	As a user, I can specify all the values for prediction and get accurate results	1	High	Narmatha S,Paarkavi A, Hemalatha R, Jameslurtin V
	Base Flask App	USN-8	Integrate Flask and the built model	2	High	Narmatha S,Paarkavi A, Hemalatha R, Jameslurtin V
Sprint	Functional Requirement	User Story	User Story / Task	Story Points	Priority	Team Members

	(Epic)	Number				
Sprint - 4	Integration	USN-9	Integrate the app on IBM cloud	2	High	Narmatha S, Paarkavi A, Hemalatha R, Jameslurtin V
	About page	USN-10	As a user, I can know about the predictor system	1	Medium	Narmatha S, Paarkavi A, Hemalatha R, Jameslurtin V

6.2 Project Tracker, Velocity & Burndown Chart

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

****Burndown Chart and Velocity to be updated after the completion of sprints.**

6.3 Reports from JIR

Burndown Chart:



BURNDOWN CHART

7. CODING & SOLUTIONING

7.1 Feature 1 - FLASK APP

The following is the flask app code and working

```
1 from flask import Flask, render_template, redirect, url_for,
  request
2 import requests
3
4 app = Flask(__name__)
5
6 @app.route("/", methods = ['POST', 'GET'])
7 def index():
8     if request.method == 'POST':
9         arr = []
10        for i in request.form:
11            val = request.form[i]
12            if val == '':
13                return redirect(url_for("demo2"))
14            arr.append(float(val))
15
16        # deepcode ignore HardcodedNonCryptoSecret: <please
  specify a reason of ignoring this>
17        API_KEY = "wf8mge_OQdwVO8ao2kmWCtfxOfLWl8442SH44V85v2Ls"
18        token_response =
  requests.post('https://iam.cloud.ibm.com/identity/token', data={
19            "apikey": API_KEY,
20            "grant_type": 'urn:ibm:params:oauth:grant-
  type:apikey'
21        })
22        mltoken = token_response.json()["access_token"]
23        header = {'Content-Type': 'application/json',
  'Authorization': 'Bearer ' + mltoken}
24        payload_scoring = {
25            "input_data": [{"fields": [ 'GRE Score',
26                                       'TOEFL Score',
27                                       'University Rating',
28                                       'SOP',
29                                       'LOR ',
```

```

30             'CGPA',
31             'Research']],
32         "values": [arr]
33     }]
34 }
35
36     response_scoring = requests.post(
37         'https://us-
south.ml.cloud.ibm.com/ml/v4/deployments/8308fd4c-24a5-46ab-96fa-
263657ae4ad0/predictions?version=2022-10-18',
38         json=payload_scoring,
39         headers=header
40     ).json()
41
42     result = response_scoring['predictions'][0]['values']
43
44     if result[0][0] > 0.5:
45         return redirect(url_for('chance',
percent=result[0][0]*100))
46     else:
47         return redirect(url_for('no_chance',
percent=result[0][0]*100))
48     else:
49         return redirect(url_for("demo2"))
50
51 @app.route("/home")
52 def demo2():
53     return render_template("demo2.html")
54
55 @app.route("/chance/<percent>")
56 def chance(percent):
57     return render_template("chance.html", content=[percent])
58
59 @app.route("/nochance/<percent>")
60 def no_chance(percent):
61     return render_template("noChance.html", content=[percent])
62
63 @app.route('/<path:path>')
64 def catch_all():
65     return redirect(url_for("demo2"))

```



```
66
67 if __name__ == "__main__":
68     app.run()
```

7.2 Feature 2 - UI

The following is the UI code for the application.

```

1 {% extends 'index.html' %}
2 {% block body %}
3     <div class="p-4">
4         <div class="row mb-3">
5             <div class="col-4">
6                 <h2 class="text-responsive-h">
7                     Enter your details and get probability of
8                     your admission
9                 </h2>
10                <p class="text-responsive">
11                    Students are often worried about their
12                    chances of admission to University. The aim of this project is to
13                    help students in shortlisting universities with their profiles.
14                    The predicted output gives them a fair idea about their admission
15                    chances in a particular university. This analysis should also
16                    help students who are currently preparing or will be preparing to
17                    get a better idea.
18                </p>
19                <div class="d-flex justify-content-right">
20                    
22                </div>
23            </div>
24        </div>
25    </div>
26    <div class="col-8">
27        <div class="card p-2 ms-2 my-2">
28            <div class="card-body">
29                <h5 class="card-title pb-4">

```

```

20             Enter the details
21         </h5>
22         <form action="/" method="post"
id="theForm">
23             <div class="row mb-3">
24                 <label for="gre" class="col-lg-2
col-form-label">GRE Score:</label>
25                 <div class="col-lg-10">
26                     <input type="number"
class="form-control" id="gre" name="gre" min="250" max="340"
placeholder="250 to 340" required>
27                 </div>
28             </div>
29             <div class="row mb-3">
30                 <label for="tofel" class="col-lg-2
col-form-label">TOFEL Score:</label>
31                 <div class="col-lg-10">
32                     <input type="number"
class="form-control" id="tofel" name="tofel" min="50" max="120"
placeholder="50 to 120" required>
33                 </div>
34             </div>
35             <div class="row mb-3">
36                 <label for="university_rating"
class="col-lg-2 col-form-label">University Rating:</label>
37                 <div class="col-lg-10">
38                     <input type="number"
class="form-control" id="university_rating" step="0.01"
name="university_rating" min="1" max="5" placeholder="1 to 5"
required>
39                 </div>
40             </div>
41             <div class="row mb-3">
42                 <label for="sop" class="col-lg-2
col-form-label">SOP:</label>
43                 <div class="col-lg-10">
44                     <input type="number"
class="form-control" id="sop" name="sop" step="0.01" min="1"
max="5" placeholder="1 to 5" required>
45                 </div>

```

```


46         </div>
47         <div class="row mb-3">
48             <label for="lor" class="col-lg-2
col-form-label">LOR:</label>
49             <div class="col-lg-10">
50                 <input type="number"
class="form-control" id="lor" name="lor" step="0.01" min="1"
max="5" placeholder="1 to 5" required>
51             </div>
52         </div>
53         <div class="row mb-3">
54             <label for="cgpa" class="col-lg-2
col-form-label">CGPA:</label>
55             <div class="col-lg-10">
56                 <input type="number"
class="form-control" id="cgpa" name="cgpa" step="0.01" min="5"
max="10" placeholder="5 to 10" required>
57             </div>
58         </div>
59         <fieldset class="row mb-3">
60             <legend class="col-form-label
col-sm-2 pt-0">Research:</legend>
61             <div class="col-sm-10">
62                 <div class="form-check">
63                     <input class="form-check-
input" type="radio" name="yes_no_radio" id="gridRadios1"
value="1">
64                     <label class="form-check-
label" for="yes_no_radio">
65                         Yes
66                     </label>
67                 </div>
68                 <div class="form-check">
69                     <input class="form-check-
input" type="radio" name="yes_no_radio" id="gridRadios2"
value="0" checked>
70                     <label class="form-check-
label" for="yes_no_radio">
71                         No
72                     </label>

```

```


73         </div>
74     </div>
75 </fieldset>
76 <div class="row lg-3">
77     <div class="col-lg-2 mb-2 me-3">
78         <button type="submit"
class="btn btn-primary" id="button">Predict</button>
79     </div>
80     <div class="col-lg-2"
id="spinner">
81         <div class="spinner-border
text-primary m-1" role="status">
82             <span class="visually-
hidden">Loading...</span>
83         </div>
84         <div class="spinner-grow
text-primary m-1" role="status">
85             <span class="visually-
hidden">Loading...</span>
86         </div>
87     </div>
88 </form>
89 </div>
90 </div>
91 </div>
92 </div>
93 </div>
94 <script type="text/javascript" src="../../static/js/script.js"
async></script>
95 {% endblock %}
96
97 {% extends 'index.html' %}
98
99 {% block body %}
100
101 <div class="container text-center p-4">
102     <div class="d-flex justify-content-center">
103
104         <div class="card" style="width: 34rem;">
105             
106         <div class="card-body">
107             <h5 class="card-title">You Have Chance</h5>
108             <p class="card-text">The model has predicted
                that you have <strong>{{content[0]}}%</strong> chance</p>
109             <a href="/home" class="btn btn-primary">Go
                Back</a>
110         </div>
111     </div>
112 </div>
113 </div>
114
115 {% endblock %}

```


University Admission Eligibility Prediction System

Enter your details and get probability of your admission

Students are often worried about their chances of admission to University. The aim of this project is to help students in shortlisting universities with their profiles. The predicted output gives them a fair idea about their admission chances in a particular university. This analysis should also help students who are currently preparing or will be preparing to get a



Enter the details

GRE Score:	<input type="text" value="254"/>
TOFEL Score:	<input type="text" value="70"/>
University Rating:	<input type="text" value="1 to 5"/>
SOP:	<input type="text" value="1 to 5"/>
LOR:	<input type="text" value="1 to 5"/>
CGPA:	<input type="text" value="5 to 10"/>
Research:	<input type="radio"/> Yes <input checked="" type="radio"/> No

8. TESTING

8.1 Test Cases

1	Serial No.	GRE Score	TOEFL Score	University Rating	SOP	LOR	CGPA	Research	Chance of Admit
2	1	337	118	4	4.5	4.5	9.65	1	0.92
3	2	324	107	4	4	4.5	8.87	1	0.76
4	3	316	104	3	3	3.5	8	1	0.72
5	4	322	110	3	3.5	2.5	8.67	1	0.8
6	5	314	103	2	2	3	8.21	0	0.65
7	6	330	115	5	4.5	3	9.34	1	0.9
8	7	321	109	3	3	4	8.2	1	0.75
9	8	308	101	2	3	4	7.9	0	0.68
10	9	302	102	1	2	1.5	8	0	0.5
11	10	323	108	3	3.5	3	8.6	0	0.45
12	11	325	106	3	3.5	4	8.4	1	0.52
13	12	327	111	4	4	4.5	9	1	0.84
14	13	328	112	4	4	4.5	9.1	1	0.78
15	14	307	109	3	4	3	8	1	0.62
16	15	311	104	3	3.5	2	8.2	1	0.61
17	16	314	105	3	3.5	2.5	8.3	0	0.54
18	17	317	107	3	4	3	8.7	0	0.66
19	18	319	106	3	4	3	8	1	0.65
20	19	318	110	3	4	3	8.8	0	0.63
21	20	303	102	3	3.5	3	8.5	0	0.62
22	21	312	107	3	3	2	7.9	1	0.64
23	22	325	114	4	3	2	8.4	0	0.7
24	23	328	116	5	5	5	9.5	1	0.94
25	24	334	119	5	5	4.5	9.7	1	0.95
26	25	336	119	5	4	3.5	9.8	1	0.97
27	26	340	120	5	4.5	4.5	9.6	1	0.94
28	27	322	109	5	4.5	3.5	8.8	0	0.76

8.2 User Acceptance Testing

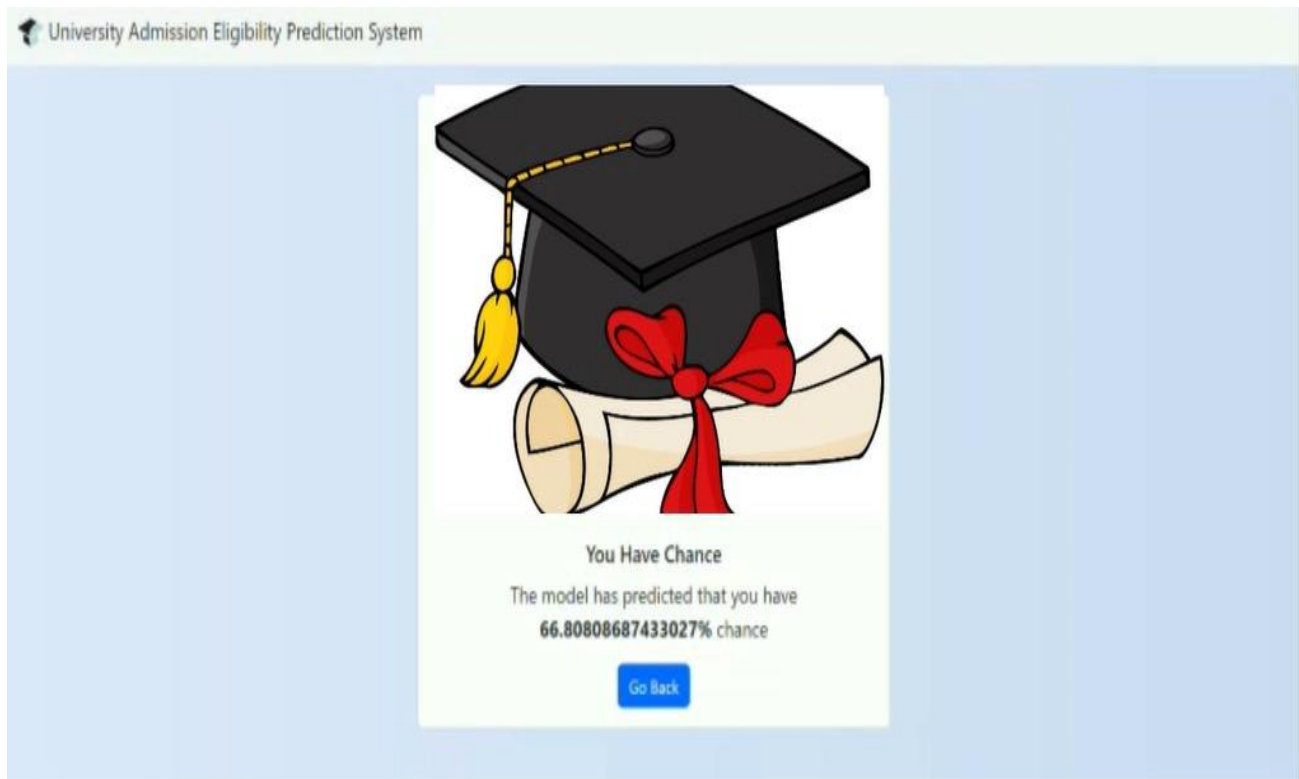
User Acceptance Testing (UAT) is a type of testing performed by the end user or the client to verify/accept the software system before moving the software application to the production environment. UAT is done in the final phase of testing after functional, integration and system testing are done.

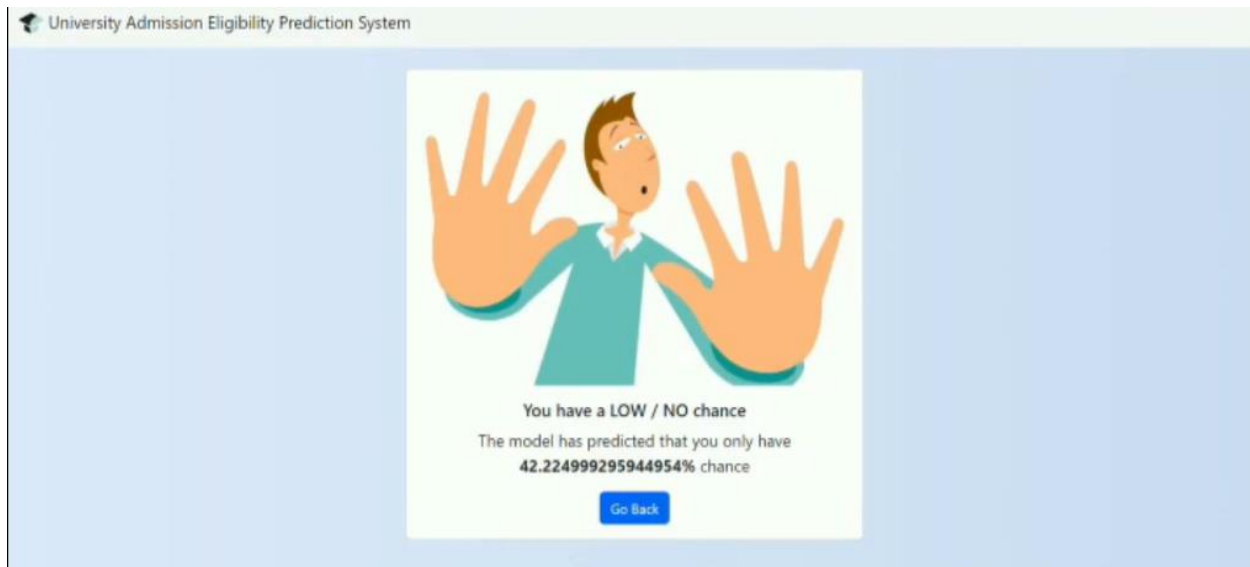
The User Acceptance of this product is not surveyed enough to give a solid conclusion. The theoretical and hypothetical acceptance is calculated to be high enough to conclude that this product is usable and valuable.

9. RESULTS

9.1 Performance Metrics

The Performance is the Accuracy of the model trained. The training accuracy of the model is 92%.





10. ADVANTAGES & DISADVANTAGES

> ADVANTAGE

1. Know the percentage
2. Lower investigation
3. Provide Relevant Material
4. Reduce time consumption
5. Good user experience

> DISADVANTAGE

1. Significant investments required
2. Unable to capture changes
3. Privacy concerns

11. CONCLUSION

We have successfully developed an application using python flask, HTML, CSS. By using the application we can predict whether we can get admission in the desired University or not.

12. FUTURE SCOPE

In future we would like to enhance the existing model in such a way that consumer feels the same way when purchasing in store using Virtual reality and other upcoming technologies. Research to improve the accuracy of the system is under progress.

13. APPENDIX Source Code GitHub & Project Video

Github Link: <https://github.com/IBM-EPBL/IBM-Project-37786-1660324768>

Project Video : <https://drive.google.com/file/d/1yCwaGEERtSiJrn93Fct6C-i6MejeGByy/view?usp=sharing>